Abstract of the disclosure

A method is known of compensating for misregistration during operation of a printing press, in particular a sheet-fed offset printing press, in which misregistration occurring in the individual printing units are countered by register corrections. In order to provide a simple method to reduce misregisters after a pause in printing and in particular after washing of the rubber blanket cylinder, the pattern of the misregistration (PD) after a pause in printing is determined in a calibration phase over a sufficient number of sheets, data as a function of the pattern of the misregistration is stored in a memory unit (15) so that register correction values (Ki) may be determined and the register correction values are applied to the printing press upon restart after the pause in printing in order to compensate for the misregistration.